COASTAL CONSERVANCY

Staff Recommendation
June 15, 2017

**Martin Slough Enhancement**

Project No. 01-156-03
Project Manager: Joel Gerwein

**RECOMMENDED ACTION:** Authorization to disburse up to $1,730,000 to the Redwood Community Action Agency to enhance and restore wetlands, water quality, and fish and wildlife habitat in and adjacent to Martin Slough in the Elk River watershed in Humboldt County.

**LOCATION:** Elk River Watershed, adjacent to the City of Eureka, Humboldt County

**PROGRAM CATEGORY:** Resource Enhancement

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***EXHIBITS***

Exhibit 1: Project Location and Site Map

Exhibit 2: Final Initial Study-Mitigated Negative Declaration (including Mitigation Monitoring Program)

Exhibit 3: Project Designs

Exhibit 4: Site Photographs

Exhibit 5: Project Letters

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**RESOLUTION AND FINDINGS**:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251-31270 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of up to one million seven hundred thirty thousand dollars ($1,730,000), comprised of $980,000 of funds deriving from a United States Fish and Wildlife Service (USFWS) National Coastal Wetlands Conservation (NCWC) grant and $750,000 of Conservancy funds, to the Redwood Community Action Agency ("RCAA") to enhance and restore wetlands, water quality, and fish and wildlife habitat, and reduce flooding in and adjacent to Martin Slough in the Elk River watershed in Humboldt County. This authorization is subject to the following conditions:

1. Prior to disbursement of funds for each phase of the project, RCAA shall submit for the review and approval of the Executive Officer of the Conservancy:

b. a.a work plan, schedule, budget, and the names of any contractors to be employed for implementation of that phase of the project;evidence that all permits and approvals necessary for that phase of the project have been obtained; and

c. evidence that all necessary funds for implementation of that phase of the project have been obtained.

2. RCAA shall enter into an agreement sufficient to protect the public interest in the improvements, pursuant to Public Resources Code Section 31116(c).

3. RCAA shall acknowledge Conservancy and USFWS funding by erecting and maintaining signs that have been reviewed and approved by the Executive Officer.

4. In implementing the project RCAA shall ensure compliance with:

b. All applicable mitigation measures and monitoring and reporting requirements for the project that are identified in the Initial Study-Mitigated Negative Declaration ("IS-MND") and the Mitigation Monitoring and Reporting Plan ("MMRP"), attached to the accompanying staff recommendation as Exhibit 2, or in any permits, approvals or additional environmental documentation required for the project.

c. All requirements of the USFWS grant, including compliance with the National Environmental Policy Act."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

7. The proposed project is consistent with the current Project Selection Criteria and Guidelines.

8. The proposed authorization is consistent with the purposes and objectives of Chapter 6 of Division 21 of the Public Resources Code (Sections 31251-31270), regarding the enhancement of coastal resources.

9. The Redwood Community Action Agency is a non-profit organization existing under section 501(c)(3) of the Internal Revenue Service code whose purposes are consistent with Division 21 of the Public Resources Code.

10. The Conservancy has considered the Final Initial Study-Mitigated Negative Declaration (IS-MND) (attached to the accompanying staff recommendation as Exhibit 2) adopted by the County of Humboldt on June 2, 2017, pursuant to the California Environmental Quality Act, public comment to the IS-MND, and the Mitigation Monitoring and Reporting Program developed to mitigate potentially significant environmental effects, and finds that the project as designed avoids, reduces or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the project may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382."

## PROJECT SUMMARY:

The proposed authorization would help the Redwood Community Action Agency (RCAA) to restore and enhance wetlands, water quality, and fish and wildlife habitat in and adjacent to Martin Slough, while reducing flooding of the agricultural and recreational lands in and adjacent to the project area. The project area consists of the general flood plain between Swain Slough and the upper (second) Fairway Drive stream crossing in the lower Martin Slough watershed (Exhibit 1), adjacent to and southeast of the City of Eureka in Humboldt County. Existing problems in the project area include limited fish access, poor fish habitat, large sediment loads, impaired sediment transport, lack of riparian habitat, and frequent prolonged flooding that has a negative economic impact on current land use (Exhibit 4).

Martin Slough was historically an important tributary to the Elk River, which drains to Humboldt Bay, and provided substantial anadromous fish habitat and other aquatic and riparian values. The Martin Slough watershed covers approximately 5.4 square miles, with a natural channel length of over 10 miles and approximately 7.5 miles of potential salmonid fish habitat supporting four federally listed fish species: Coho and chinook salmon, steelhead, and tidewater goby. Martin Slough also supports a population of coastal cutthroat trout and numerous other non-listed estuarine species. The tidal and freshwater wetlands historically surrounding the slough once provided abundant habitat for waterfowl, geese, and other species. However, Martin Slough has been extensively modified over the past century by channelization and installation of tide gates at its confluence with Swain Slough (Exhibit 4). Tide gates have restricted fish passage and sediment transport. Channel realignment has reduced the natural channel dimensions and sinuosity. In addition, removal of riparian vegetation has allowed invasive exotic plants such as reed canary grass to establish within the active channel by removing the shade canopy. The reed canary grass infestation has further reduced conveyance capacity, causing sedimentation of the streambed. However, significant habitat value remains in Martin Slough and its floodplain as evidenced by documentation of very large Coho salmon utilizing ponds in the City of Eureka's municipal golf course, located within the project area.

Pasturelands adjacent to the lower end of the slough, as well as portions of the Eureka Municipal Golf Course, are subject to frequent flooding. Flooding reduces the productivity of the pastureland for grazing and reduces the recreational opportunities at the golf course, as well as reducing its economic viability. The project will improve wetland habitat, recreational opportunities, and grazing value by re-grading agricultural and golf course lands to restore muted tidal marsh, freshwater wetlands, and slough channels, and improve wetland hydrological functions adjacent to the slough, while reducing flooding on neighboring lands.

The project includes multiple components that will work together to improve fish passage and provide critical off-channel rearing habitat, restore and enhance wetlands, aquatic, and riparian habitat, and reduce flooding of adjacent lands (Exhibits 1 and 3), some of which have already been implemented. A new tidegate was installed in December 2014 to replace failing and undersized tidegates that were a partial barrier to fish passage. The work funded under this authorization consists of two phases[1]. The first phase (Land Trust Phase) will take place at the

[1] Project phasing has changed over time. The Land Trust Phase described in this staff recommendation is referred to in the IS-MND as Phases 2 and 4, while the Pond D Phase is part of what is referred to in the IS-MND as Phase 5.

downstream end of the project area on land owned by the Northcoast Regional Land Trust (NRLT). This phase will be constructed in 2017 and 2018. All funds necessary for construction of the Land Trust phase, apart from $1,391,000 of the proposed grant of USFWS and Conservancy funds, have already been secured. The second phase of the project (Pond D Phase) will take place at the downstream end of the golf course. The proposed Conservancy grant would fund $339,000 of the total $635,000 cost of the Pond D Phase. RCAA is applying to the California Natural Resources Agency's Environmental Enhancement and Mitigation grant program for the remaining funds for the Pond D Phase, and hopes to construct this phase in 2018, along with part of the Land Trust Phase. Additional enhancement work has been planned upstream of the Pond D Phase, and grant applications are pending or planned to other funding agencies for that work. The work completed to date and the Land Trust Phase will provide significant benefits in terms of fish and wildlife habitat and flooding reduction even if funding for additional work is not secured. The Land Trust and Pond D work, to be completed in 2017 and 2018, involves the following components (Exhibit 3):

Land Trust Phase

- Restoration of 3 acres of salt marsh along the Martin Slough mainstem channel and restored meander (Marsh Plains A and B);
- Restoration of 1.7 acres of off channel salt marsh (Pond C Marsh) with a low elevation pond fed by a freshwater spring;
- Restoration of 2,400 ft of mainstem Martin Slough (channel will be widened and deepened);
- Restoration of 3,400 ft of tidal channels, consisting of a 2,000 ft long, 15 ft wide, restored high flow meander channel, a 700 ft long, 20 ft wide, tributary channel, and a 700 ft long, 10 ft wide channel providing tidal flow to the Pond C marsh;
- Creation of a small freshwater pond on Martin Slough's Southeast Tributary;
- Installation of 18 large wood structures to enhance instream habitat complexity and provide refugia; and
- Restoration of riparian habitat adjacent to brackish wetlands and salt marsh.

Pond D Phase

- Restoration of 2 acres of brackish wetlands containing deep open water and littoral benches supporting wetland vegetation on Martin Slough's East Tributary;
- Restoration of 1,400 ft of mainstem Martin Slough;
- Installation of four large wood structures to enhance instream habitat complexity and provide refugia; and
- Restoration of riparian habitat adjacent to brackish wetlands and salt marsh.

The tide gate replacement, tidal pond construction, and tidal marsh restoration are described in more detail below.

*Tidegate:* The new tide gate structure was installed in 2014. It includes a muted tidegate regulator, three 6' X 6' tidegates, and an auxiliary door to prolong the duration of upstream fish

passage and to create a diversity of tidal elevations necessary to support salt and brackish marsh to be restored by the Project. The tidegate was designed to meet multiple objectives:

- Allow a muted tide to enter Martin Slough, providing adequate tidal prism for sediment and nutrient flushing and enlargement of estuarine habitat.
- Maintain the tidal water below elevation 6 feet (NAVD88) to protect adjacent pasture grasses and turf from salt-burn.
- Mimic the natural variability of the tidal cycle within the muted tide range to support a variety of salt marsh and open water habitats.
- Maximize the amount of time the tide gates are open to provide for upstream and downstream movement of aquatic organisms.
- Maximize the amount of time water velocities through the gate openings meet passage criteria for adult and juvenile salmon and steelhead.
- Reduce the duration that floodwaters inundate the golf course.

However, until wetland and channel restoration has been completed, the new tidegate is being operated at an interim level that maintains tidal levels below elevation 5 feet in order to prevent excessive scour of the channel, which could threaten existing bridges and gas lines. While this interim level represents an improvement from the previous tidegates that leaked but blocked most fish passage and tidal flow, it is still not optimal for fish passage or for wetland habitat.

*Tidal marsh and ponds:* Tidal marsh and ponds to be constructed as part of the project were designed to create side channel and off-channel rearing conditions preferred by juvenile Coho salmonids. The Coho salmon population in the project area is part of the Southern Oregon Northern California Evolutionary Significant Unit, an imperiled population that is critical to the species, yet is at high risk of extinction. Coho, once abundant across the rivers and estuaries of western North America, were listed as threatened under the ESA in 1997. Its status has continued to worsen, with an 80% decline in salmonid populations between the 1950s and 1990s in the North Coast region. Despite this decline, the remaining North Coast populations still represent the most important anadromous fish runs in the state.

While the Humboldt Bay watershed contains some of the last healthy salmon streams in California, many of these streams suffer degraded habitat quality and complexity, especially in the low-gradient reaches that are important for salmonids. Passage barriers such as culverts and tide gates, along with riparian vegetation removal and sedimentation, have reduced the extent and quality of Coho rearing habitat. Channelization and channel straightening has led to the loss of off channel wetlands and backwater refugia, which are critical for Coho. These impaired watershed conditions make the restoration of Martin Slough especially vital for this species. The Martin Slough channel lacks complexity, riparian vegetation, and floodplain marshes. Restoration of the project area will make a valuable contribution to species recovery, as well as benefitting threatened Chinook salmon and steelhead.

The off-channel nature of the ponds and outlet designs are intended to minimize entry of sediments and control salinity entering from the main channel into the ponds. The ponds were designed to provide a complex shoreline with a variety of water depths to create a range of wetland vegetation and habitat areas. Pond outfall elevations and locations were designed to limit winter saltwater intrusion while maximizing the amount of time the pond is hydraulically

connected to the channel. Pond outfall elevations were also established to ensure the ponds are flooded twice daily by the tidal cycle. This will allow aquatic organism ingress and egress, and ensure frequent water exchange and flushing between the pond and main channel. Additionally, each pond outfall was set at a different elevation to create a diversity of off-channel conditions and habitats.

Approximately 3,000 linear feet of tidal marsh plain will be constructed along alternating sides of the tidal channel in the downstream reach. The marsh plain will have a width of 50 feet with gentle side slopes transitioning to existing ground. The marsh plain will range in elevation from 4.8 to 6 feet; this range in elevations is expected to support a range of salt marsh plant species, including pickleweed-dominated marsh and mixed marsh.

*Gas line relocation:* The project will include relocation of 130 feet of a 6-inch natural gas line, de-commissioning of a 4-inch gas line, and installation of scour protection over a 12-inch gas line where it crosses the meander on NRLT property and the East Tributary on the golf course. The gas lines are owned and operated by Pacific Gas & Electric (PG&E), and PG&E will fund and implement the gas line removal and decommissioning. PG&E has determined that the 4-inch gas line is a redundant line and its de-commissioning will not affect service to its customers.

RCAA is highly qualified to carry out the restoration project. RCAA has been engaged in watershed restoration projects since the establishment of its Natural Resources Services Division in 1983, and has been involved in planning and implementation of restoration projects on several tributaries to Humboldt Bay, including Cochran and Redmond Creeks, Wood Creek, and McDaniel Slough.

**Site Description:** The Martin Slough Enhancement Project is located in and adjacent to the southeast portion of the City of Eureka (Exhibit 1). Martin Slough is the lowest tributary to Elk River via Swain Slough, and is separated from Swain Slough by a levee and tide gate. The lower portion of the watershed flows through low gradient bottomland containing the golf course and pastureland. Many of the stream channels flow from gulches that contain mature second-growth redwood forests. The upper portions of the watershed are either in urban settings, or are recently harvested timber lands slated for future residential and commercial development. The Martin Slough watershed includes both City and County jurisdictions, with the project area owned by the City of Eureka (approximately 120 acres) and the NRLT (39 acres). The project area is partially within the coastal zone.

Land use in the Martin Slough watershed includes a mix of residential, agricultural, timberlands, and municipal infrastructure. Humboldt County's Eureka Community Plan includes future residential development of the southeastern portion of the Martin Slough watershed. This currently forested area will likely be eventually phased out of its current timber production zone (TPZ) status to allow for residential or mixed-use development. This conversion could modify the watershed hydrology and potentially result in increased storm water runoff. Its actual effect on peak flows within Martin Slough will be dependent on the measures taken by future development to address storm water runoff, currently set for no net increase by the County.

The project area is currently zoned Public Facility and Agriculture Exclusive. Municipal infrastructure directly within the project area includes the City-maintained Fairway Drive, three natural gas lines, a sewer line, a sewage interceptor line, and the Eureka Municipal Golf Course. The Humboldt Community Services District also has existing sewer infrastructure near Fairway Drive.

The downstream end of the project area consists of grazing land acquired by the Northcoast Regional Land Trust in 2011 through a Conservancy grant. The upstream end of the project area consists of the Eureka Municipal Golf Course. The grazing land consists of 39 acres of grasslands dominated by species such as annual bluegrass (*Poa annua*) and perennial ryegrass (*Lolium perenne*). Much of these grasslands are seasonal wetlands, characterized by species such as meadow foxtail (*Alopecurus genticulatus*) and creeping buttercup (*Ranunculus repens*), with a smaller area of upland grassland, characterized by species such as hairy cat's ear (*Hypochaeris radicata*) and sweet vernal grass (*Anthoxanthum odoratum*). Lyngbye's sedge (*Carex lyngbyei*), listed by the California Native Plant Society as a rare plant (List 2), is found along the banks of Martin Slough within the property. This area is currently leased for grazing, and includes a barn located at the east end of Pine Hill Road. The golf course consists primarily of grassland. Adjacent to the slough, the golf course grassland is dominated by tall fescue (*Festuca arundinacea)*, annual bluegrass, perennial ryegrass, and colonial bentgrass (*Agrostis capillaries*). Like the grazing land, much of the golf course grasslands are wetlands, with smaller areas of uplands dominated by Kentucky bluegrass (*Poa pratensis*), cow parsnip (*Heracleum lanatum)*, white clover (*Trifolium repens*), soft brome (*Bromus hordeaceus*), hairy cat's ear, orchard grass (*Dactylis glomerata)*, and sweet vernal grass.

**Project History:** Frequent and prolonged flooding of roads, agricultural land, and the Eureka municipal golf course along Martin Slough has occurred for a significant number of years, reducing the economic and recreational values of the area. Further, degradation of fish and waterfowl habitat has diminished the ecological value of the area. Both factors clearly establish a need for this project. The Conservancy granted $100,000 to RCAA in 2002 to prepare the Martin Slough Enhancement Plan, which was completed in 2005. The project participants agreed on a preferred alternative in 2006. In order to further the restoration project, NRLT acquired the Senestraro Property in 2011, funded by a $315,000 Conservancy grant. RCAA approached the Conservancy for technical assistance with the IS-MND and funding for the restoration project in January 2012, and Conservancy staff has been working with RCAA on the implementation of the project since that time. The Conservancy provided $30,000 to fund permitting for the tidegate replacement component of the project in 2013. The remaining project construction was delayed due to difficulties in raising ~$3M in funding for the decommissioning and realignment of two of the three gas lines that cross the property. PG&E agreed to pay for costs associated with the gas lines in winter 2016, allowing the project to move forward. RCAA applied to the Conservancy for a Proposition 1 grant for the project in fall 2016.

The Conservancy applied to the USFWS for $1,000,000 in funding for the project from the National Coastal Wetlands Conservation program in June 2016, and the USFWS awarded the grant in January 2017. The County of Humboldt certified an IS-MND for the restoration project on June 2, 2017.

**PROJECT FINANCING**

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| **Coastal Conservancy** | $750,000 |
| US Fish and Wildlife Service (National Coastal Wetlands Conservation grant through the Conservancy) | $980,000 |
| Natural Resources Conservation Service | $100,000 |
| California Department of Water Resources | $210,400 |
| National Oceanic and Atmospheric Administration | $1,091,045 |
| PG&E | $3,010,500 |
| City of Eureka | $20,000 |
| To Be Determined | $300,000 |
| **Total Project Costs** | $6,461,945 |

The USFWS has awarded $1,000,000 to the Conservancy for project implementation, contingent on compliance with the National Environmental Protection Act. Approximately $980,000 of the grant will support project implementation directly, while the remaining $20,000 will pay for Conservancy staff costs.

The anticipated source of funding for this project is the fiscal year 2016 appropriation from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 79730) and may be used "for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state" (Section 79731). Section 79732(a) states more specifically that these funds may be used to "implement watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystems." Consistent with this provision, the project will facilitate wetland restoration that will reduce flooding of agricultural and recreational land in the project vicinity from storm events that are expected to increase in frequency with climate change. The project would therefore further assist with adaptation to climate change for local ranchers and residents. Section 79732(a) also states that these funds may be used to "protect and restore aquatic, wetland, and migratory bird ecosystems including fish and wildlife corridors," "collaborate with federal agencies in the protection of fish native to California," and "assist in the recovery of endangered, threatened, or migratory species by improving watershed health". Consistent with these provisions, the project would restore aquatic and wetland ecosystems serving as fish and wildlife corridors for native Californian endangered Coho, in collaboration with the USFWS.

As required by Proposition 1, the proposed project provides multiple benefits. By restoring wetland and riparian habitat in the Elk River watershed, the project will benefit depleted native fish populations and other aquatic and avian species that utilize riparian habitat. This project will also produce economic benefits by facilitating the recovery of Coho and steelhead, which support recreational fisheries. The project would also further climate change adaptation by reducing flooding of pastureland and recreational land.

In accordance with Section 79707(b) which requires agencies to prioritize "projects that leverage private, federal, or local funding or produce the greatest public benefit", this project leverages federal contributions described in the "Project Summary" section, and local cash and in-kind contributions as discussed in the second paragraph below.

The project was reviewed and subsequently recommended for funding through a competitive grant process under the Conservancy's *Proposition 1 Grant Program Guidelines* adopted in June

2015, as amended in September 2016 ("Prop 1 Guidelines"). (See Section 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this "Project Financing" section, the "Project Summary" section and in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section of this staff recommendation.

PG&E will fund the decommissioning and realignment of two gas lines in the project area. PG&E's estimate of the cost of these tasks is $3,010,500. The California Department of Water Resources will provide $210,400 for this phase of project implementation from an Urban Streams Restoration grant. The National Oceanic and Atmospheric Administration (NOAA) is providing $1,091,045 for project implementation. The Natural Resources Conservation Service is providing $100,000 for project implementation on the NRLT property. The City of Eureka is providing $20,000 to assist with replacement of golf course bridges.

As noted above, $300,000 remains to be secured for the restoration of brackish wetlands on the downstream portion of the Eureka Municipal Golf Course. RCAA is submitting a proposal to the Environmental Enhancement and Mitigation Program administered by the California Natural Resources Agency. If the grant proposal is not successful, RCAA will submit proposals to other potential funding sources, such as the CDFW and WCB Proposition 1 programs and the Small NAWCA Grant Program. Conservancy funds for work on the golf course will not be disbursed until all funds for this phase of the project have been secured.

## CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project is undertaken pursuant to Chapter 6, Sections 31251-31270, regarding resource enhancement. Pursuant to Section 31251, the Conservancy may award grants to nonprofit organizations for the purpose of enhancement of coastal resources that, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the RCAA will enhance and restore wetlands, water quality, and fish and wildlife habitat in and adjacent to Martin Slough, which suffers from channelization, loss of riparian vegetation, and restriction of fish passage by tide gates. The project area will be permanently managed for the protection of the restored and enhanced habitats, and for the continuation of compatible recreational and agricultural uses.

Pursuant to Section 3125.2, the project, which is partially outside of the coastal zone, is being undertaken at the request of, and in partnership with, the County of Humboldt and the City of Eureka. Also pursuant to Section 3125.2, the project, which concerns the management of fish, has been approved by CDFW, which provided $232,831 for design and planning through the Fisheries Restoration Grant Program in 2012 and is providing staff time for fish monitoring as non-federal match to the USFWS NCWC grant.

Pursuant to Section 31252, all areas proposed for resource enhancement are to be identified in a Local Coastal Plan/Program (LCP) as requiring public action to resolve existing or potential resource problems. Consistent with this section, the proposed project will facilitate the restoration of Martin Slough and associated wetlands, and is therefore consistent with the County of Humboldt's LCP, as described in the "Consistency with Local Coastal Plan" section, below.

## CONSISTENCY WITH CONSERVANCY'S 2007 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 5, Objective B** of the Conservancy's 2007 Strategic Plan, the proposed project will facilitate the restoration and enhancement of 50 acres of coastal habitats, including tidal marsh, riparian and aquatic habitat.

## CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's current Project Selection Criteria and Guidelines, in the following respects:

### Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Promotion and implementation of state plans and policies:** The Project will help implement two priority actions identified in the 2014 *California Water Action Plan* (CWAP):

   Action 4: Protect and Restore Important Ecosystems. The Project will implement this action by restoring tidal marsh in an estuary that provides valuable fish and wildlife habitat.

   Action 8: Increase Flood Protection. The CWAP calls for action to address flooding threats due to aging levee infrastructure and sea level rise due to climate change. The Project will implement this action as discussed under Criterion 8, "Sea level rise vulnerability," below.

   The Project will implement a Management Measure identified in the *California Nonpoint Source Pollution Control Program* prepared by the State Water Resources Control Board in 2000: MM6B- Restoration of Wetlands and Riparian Areas. The Project will further the following statewide goals and conservation strategies of the *California Wildlife Action Plan* (Wildlife Plan), prepared by the California Department of Fish and Wildlife in 2015:

   Goal 3.3 (Hydrological Regime): Maintain or improve hydrological regimes vital for sustaining ecosystems (including riverine, lacustrine, and estuarine hydrodynamics). (pg. 4-3)

   The Project will help implement the following conservation strategies identified by the Wildlife Plan for anadromous salmonids in coastal estuaries on the North Coast:

   Restore and enhance estuary habitat, connectivity, and ecological processes essential for anadromous species; and

   Establish estuary function and structure that will allow anadromous migration and be responsive to climate change. (pg. 6-19)

The Project would help implement the following tasks identified in the *Recovery Strategy for California Coho Salmon*, prepared by CDFW in 2004:

- Eureka Plain Task 2: Work with agencies and landowners, to re-establish estuarine function.
- Eureka Plain Task 10: In cooperation with willing landowners, restore and maintain historical tidal areas, backwater channels and salt marsh.
- Rangewide-Estuaries Task 2: Restore estuarine and associated wetland ecosystems.

4. **Support of the public:** Supporters of the project include the City of Eureka, State Senator Mike McGuire, and Assemblyman Jim Wood. Support letters are in Exhibit 5.
5. **Location:** The proposed project would benefit coastal resources and would be located partially within the coastal zone of Humboldt County.
6. **Need:** The project requires significant amounts of funding (See "Financing" Section above), and RCAA will not be able to complete it without Conservancy support. Flooding of roads, agricultural land, and the golf course has reduced the economic and recreational values of the Martin Slough area. Further, degradation of fish and waterfowl habitat has diminished the ecological value of the area. Both factors clearly establish a need for the restoration of Martin Slough, and Conservancy funding is critical to the project.
7. **Greater-than-local interest:** The public trust value of California's salmon, steelhead, and coastal waterfowl populations warrant the enhancement of historically rich but degraded habitat areas, such as the Martin Slough project area.
8. **Sea level rise vulnerability:** Flooding of the property will increase as a result of sea level rise. Increased flooding and other effects of sea level rise were taken into consideration in the restoration planning for Martin Slough. The reinforcement of levees along Swain Slough and the new tidegates will allow for regulation of tidal influence to maintain the tidal marshes in the project area until these structures are overtopped, significantly prolonging the lifespan of the restored marshes.

**Additional Criteria**

9. **Urgency:** Coho salmon and other listed species in the project area are in urgent need of expanded and enhanced habitat to assist in their recovery. In addition, delays to project implementation will result in ongoing degradation of habitat in the project area as the channel continues to fill with sediment and invasive canary grass.
10. **Resolution of more than one issue**: Project implementation will both restore wetlands and riparian habitat and reduce the frequency and duration of flooding in the vicinity, thereby enhancing agricultural productivity, increasing recreational opportunities at the Eureka's municipal golf course and reducing damage to the neighboring residential area.
11. **Readiness**: Project construction is expected to begin in August 2017. CEQA compliance has been completed, and necessary permits are expected to be issued in the immediate future. Funding for project construction on the first phase has been secured.
12. **Realization of prior Conservancy goals**: "See "Project History" above."

13. **Cooperation**: RCAA and the City will work with NRLT, the Conservancy, and other partners to complete the project.
14. **Vulnerability from climate change impacts other than sea level rise:** Agricultural use of the property is expected to be sustainable despite climate change impacts other than sea level rise, due to the moderating effects of coastal fog. Restoration planning for the Senestraro Property addressed increased flooding and invasive species, two anticipated effects of climate change.
15. **Minimization of greenhouse gas emissions:** Restoration and management planning for the project area considered how the property can be most efficiently managed for agricultural use and how restoration activities can be conducted most efficiently, minimizing greenhouse gas emissions from those activities. Greenhouse gas emissions from project construction will be further minimized through best management practices to ensure that construction equipment is properly tuned and maintained. In addition, wetlands restored by the project will sequester carbon, ultimately mitigating the relatively small impact of emissions during construction.

## CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

Rivers, creeks, sloughs, gulches, wetlands, estuaries, and associated riparian habitats, as well as grazed or farmed wetlands, are identified in the County of Humboldt Local Coastal Program (Humboldt LCP) as environmentally sensitive habitat areas (ESHA) within the County of Humboldt's coastal zone. [Humboldt LCP (3-42)]. The LCP states that dredging in grazed or farmed wetlands shall be allowed for wetland restoration (Humboldt LCP 3-43).

The Humboldt LCP cites Section 30231 of the Coastal Act, as follows: "The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored…" (Humboldt LCP, 3-48). Consistent with Section 30231, this project will restore and enhance coastal wetlands and riparian habitat in and adjacent to Martin Slough.

## COMPLIANCE WITH CEQA:

The County of Humboldt circulated a Draft IS-MND for public review between May 1, 2017 and May 31, 2017 , and issued a Final IS-MND on June 2, 2017, pursuant to the California Environmental Quality Act (Exhibit 2). The Final IS-MND identifies potentially significant impacts from the chosen alternative, but determines that they could be mitigated to "less than significant" levels.

The major adverse environmental impacts of the restoration project and the adopted mitigation measures that reduce impacts to a less than significant level are summarized below:

**Air Quality:** Project may result in significant emission of pollutants during construction.

Mitigation Measure (MM) AQ-1. RCAA will implement air quality best management practices (BMPs) recommended by the North Coast Air Quality Management District to minimize fugitive dust and particulate emissions, such as watering active construction areas, covering trucks

hauling sediment, limiting the area subject to construction disturbance at any one time, and limiting traffic speeds on unpaved access roads.

MM AQ-2. RCAA will minimize construction machinery emissions by maintaining properly tuned equipment.

**Biological Resources.** Project may result in short-term impacts to sensitive fish species, including Coho, chinook, steelhead, and tidewater goby from in-stream construction activities. Project may result in short-term disturbance of breeding or nesting migratory and/or special-status birds during construction. Project may result in short-term impacts to Red Legged Frog (RLF) from construction and maintenance activities. Project may result in short term impacts to sensitive plants from construction activities, particularly to Lyngbye's sedge and Humboldt Bay owl's clover.

MM BIO-1. In-channel construction and maintenance activities will be limited to the June 15 to October 31 dry season (and November 15 if there is no significant rain event).

MM BIO-2. Fish relocation: Before any de-watering activities begin in any creeks or channels within the project area, fish screens will be installed at the upstream and downstream ends of the construction reach, and all native aquatic vertebrates and larger invertebrates will be relocated out of the construction area into a flowing channel segment by a qualified fisheries biologist holding appropriate permits.

MM BIO-3. Nesting birds will be protected through seasonal limitations on removal of vegetation and exclusion zones around active nests.

MM BIO-4. Ground disturbance areas will be minimized.

MM BIO-5. Pre-construction surveys will be conducted for special status plants, and disturbance to identified populations will be avoided or minimized. If impacts to special status plants are unavoidable, compensatory mitigation will be carried out, including measures such as salvage, propagation, on-site reintroduction in restored habitats, and monitoring.

MM BIO-6. Lyngbye's sedge and Humboldt Bay owl's clover in areas that will be unavoidably impacted will be dug up and stored, and replanted after construction is complete.

**Cultural Resources.** Disturbance near the barn could degrade the Lorensen Ranch historic property. Inadvertent damage to currently unknown archaeological sites or materials or to human remains could occur during construction.

MM CR-1. Project construction activities near the Lorensen Ranch Dairy Barn shall be conducted in such a manner as to avoid adverse effects. Ground-disturbance in this location shall be carried out in a manner that fully protects the barn from damage, in keeping with a construction plan approved by the County Planning and Building Department.

MM CR-2. During all construction phases and prior to initiating ground disturbance, the applicant shall secure the assistance of an affiliated Tribal Historic Preservation Officer (THPO) in the presentation at field crew meetings of what to watch for.

MM CR-3. During all construction phases and prior to initiating ground disturbance, the applicant will notify all affiliated THPOs prior to initiation of work to allow an opportunity to spot check digging activities.

MM CR-4. If buried archaeological or historical resources are encountered during construction activities, the contractor shall temporarily halt all work in the immediate area, and a qualified archaeologist will be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, dietary bone, and human burials. If human remains are found during construction, the County Coroner shall be contacted immediately. If the remains are found to be those of a Native American, the California Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains.

**Geology.** Ground disturbance associated with project construction could result in temporary erosion and loss of topsoil.

MM WQ 1-5. See **Water Quality** below.

**Hazards and Hazardous Materials.** Hydraulic or fuel lines associated with construction equipment operating within the stream corridor could leak, creating a hazard to the environment.

MM HHM-1. Contractors and equipment operators on site will be required to have Emergency Spill Cleanup kits, and a Hazardous Materials Spill Prevention Control and Countermeasure Plan covering measures regarding petroleum products will be prepared and implemented if fuel storage containers are utilized exceeding a single tank capacity of 660 gallons or cumulative storage greater than 1,320 gallons. A spill prevention and response plan will also be prepared for hazardous non-petroleum chemicals utilized during construction.

**Noise.** Project may have short-term impact due to construction-related noise.

MM N-1. Restrict noise from earthmoving and hauling of soils. Hours of construction and hauling limited to M-F 7 AM-7 PM, and weekends and holidays 9 AM-6 PM. Equipment shall operate with factory-equipped mufflers, and staging areas shall be located as far from residential uses as is practical. Haul trucks shall use haul routes distant from sensitive receptors as feasible. Hauling shall minimize passing any substantial collection of noise-sensitive land uses (i.e. occupied houses, schools, hospitals), and shall be limited to less than 140 loads or one way trips (70 round trips) per day on any given road. Larger capacity belly and end-dump trucks as well as double-trailers shall be used whenever feasible to minimize trips. Construction personnel shall conduct all work activities in a manner that minimizes noise generation.

MM N-2. Notify neighbors. When activity involving heavy construction equipment is scheduled to occur within 250 ft of occupied structures, construction personnel shall provide written notification to the residents in the potentially affected properties at least 72 hours prior to using the heavy construction equipment.

**Water Quality.** Project may have short-term impacts to water quality due to construction.

MM WQ-1: Storm Water Pollution Prevention Plan. Prior to project construction, a Storm Water Pollution Prevention Plan (SWPPP) will be developed by a certified SWPPP developer and approved by the North Coast RWQCB and implemented during construction. As part of the SWPPP, BMPs for controlling soil erosion and the discharge of construction-related contaminants will be developed and monitored for successful implementation.

MM WQ-2. Implement contractor training for protection of water quality. All contractors performing work that could cause increased water pollution at the site will receive training

regarding the environmental sensitivity of the site and need to minimize impacts, as well as in implementation of stormwater BMPs for protection of water quality.

MM WQ-3. Minimize potential pollution caused by inundation. Sites will not be connected to tidal water or upstream freshwater sources until surface soil conditions have been stabilized, all construction debris removed, and all surface soils have been removed from the site.

MM WQ-4. Instream erosion and water quality control measures during channel excavation. In instances where excavation and/or dredging occurs in an effort to widen/deepen the existing channel, in-stream erosion and turbidity control measures will be implemented.

MM WQ-5. Implement Dewatering and Diversions Restrictions. Ponded storm or groundwater in construction areas will not be dewatered by project contractors directly into adjacent surface waters or to areas where they may flow to surface waters unless authorized by a permit from the North Coast RWQCB. In the absence of a discharge permit, ponded water (or other water removed for construction purposes) will be pumped into sediment basins, baker tanks, or other receptacles, characterized by water quality analysis, and remediated (e.g., filtered) and/or disposed of appropriately based on results of analysis. If determined to be of suitable quality, some of this water may be used on-site for dust control purposes. The contractor will be required to submit for review and approval by the Construction Manager Dewatering and Creek Diversion Plan that shall include the proposed dewatering and diversion techniques and schedule of operations.

**Traffic.** Project may result in a short-term increase in traffic due to construction mobilization, materials deliveries, and truck trips associated with fill disposal.

MM T-1. Traffic Control Plan. RCAA shall prepare and implement a Traffic Control Plan to reduce the effects of construction on the roadway system in the project area throughout the construction period.

On June 2, 2017, the County of Humboldt considered and adopted the IS-MND together with the associated Mitigation Monitoring and Reporting Program, with the finding that the project, as mitigated, will not have any significant adverse effects on the environment (Exhibit 2).

Staff has independently reviewed the Final IS-MND, the public comment, and the Mitigation Monitoring and Reporting Program and concurs that there is no substantial evidence based upon the whole record that the project as mitigated will have a significant adverse effect on the environment. Staff therefore recommends that the Conservancy find that the project as designed avoids, reduces or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the project may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382.

Upon approval by the Conservancy, staff will file a Notice of Determination.